

## CLAIMS

- 1/ A decoy device for wake-following torpedoes, the device comprising a body of effervescent material that reacts with sea water to generate a cloud of bubbles
- 5     simulating a phoney wake, the device being characterized in that it has a covering of material that is soluble in sea water which delays the reaction of the effervescent material with sea water.
- 10    2/ A device according to claim 1, characterized in that the covering is made of organic material.
- 3/ A device according to claim 2, characterized in that the thickness of the covering is calibrated so that when
- 15    said device is immersed, the effervescent material begins to react with sea water only after said device has been sinking for a predetermined length of time.
- 4/ A device according to claim 3, characterized in that said thickness is calibrated so that the effervescent
- 20    material<sup>6</sup> does not begin react with sea water until it is at a depth of about 10 meters.
- 5/ A device according to any one of claims 1 to 4,
- 25    characterized in that the covering is made of a material which is hydroxypropymethyl cellulose or a derivative thereof, a gum of vegetable or animal origin, a polyvinyl alcohol, a poly(N-vinylpyrrolidone), a poly(ethylene oxide), or a mixture thereof.
- 30    6/ A device according to any preceding claim, characterized in that the effervescent material comprises a mixture of tartaric acid and of sodium hydrogen carbonate.
- 35    7/ A device according to any one of claims 1 to 5, characterized in that the effervescent material comprises

a mixture of citric acid and of sodium hydrogen carbonate.

- 8/ A device according to claim 6 or 7, characterized in that the mixture is substantially stoichiometric.

9/ A device according to any one of claims 5 to 8, characterized in that the effervescent material includes a lubricant, e.g. magnesium stearate.

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10/ A device according to any one of claims 5 to 9, characterized in that the effervescent material has grains in a size range of less than 100  $\mu\text{m}$ .

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11/ A device according to any preceding claim, characterized in that the effervescent material is such that the bubbles generated thereby at a depth of 10 meters are of dimensions lying in the range 30  $\mu\text{m}$  to 50  $\mu\text{m}$ .

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12/ A device according to any preceding claim, characterized in that it further includes ballast-forming means, for the purpose of enabling it to sink faster.

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13/ A torpedo decoying method, characterized in that devices according to any preceding claim are dispersed in the sea from the air.

- 14/ A method according to claim 13, characterized in that the devices are dispersed on either side of the axis of the wake (S) of the ship so as to constitute phoney wakes (FS) meeting the wake (S) of the ship.